



COMMONWEALTH OF MASSACHUSETTS

*Charles D. Baker, Governor
Matthew Beaton, Secretary
Dan Burgess, Acting Commissioner*

Efficient Neighborhoods+

Tami Buhr, Opinion Dynamics

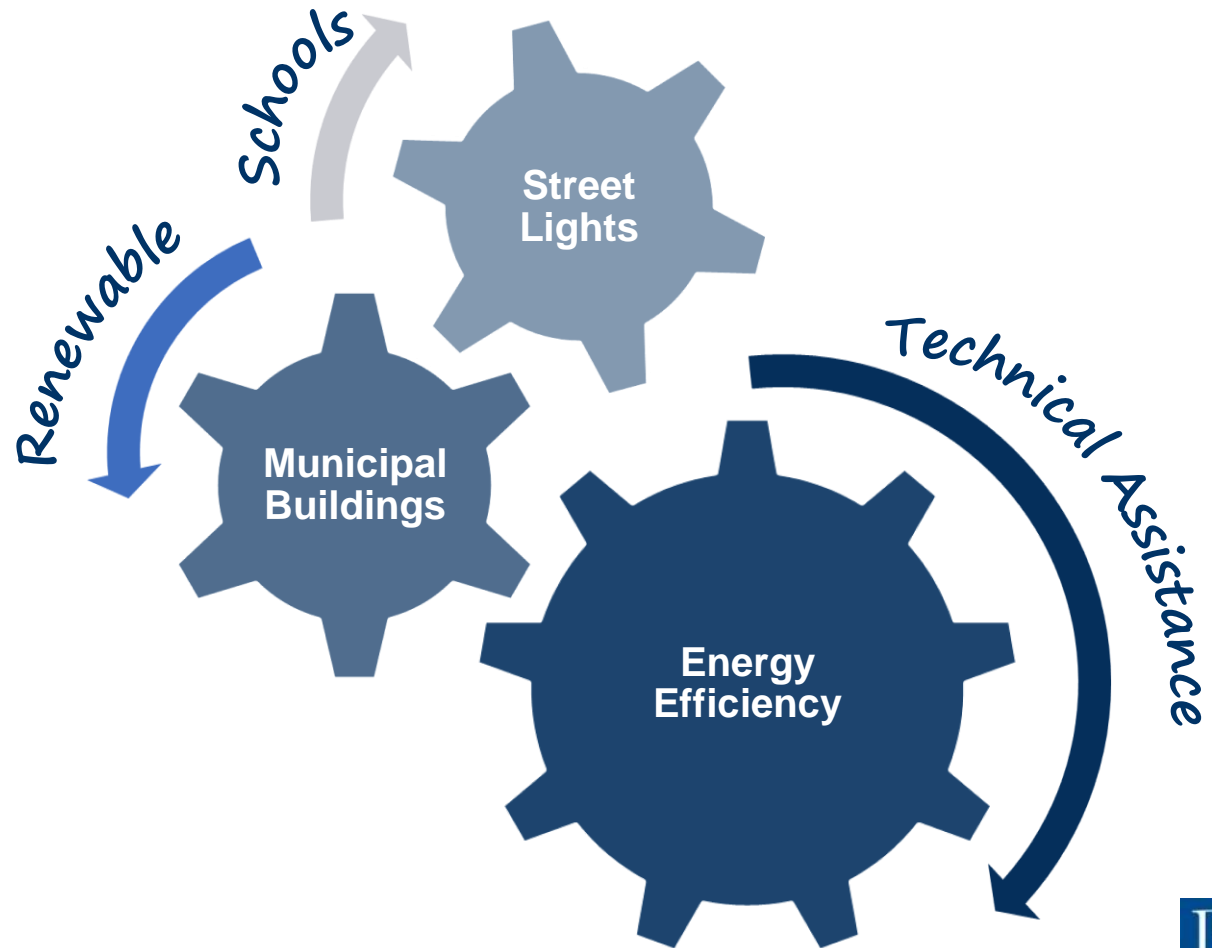
Webinar

March 11, 2014

1:00 PM

Green Communities Division

The energy hub for ***all*** Massachusetts cities and towns, not just designated “Green Communities.”



Helping Massachusetts Municipalities Create A Cleaner Energy Future



Outreach - Regional Coordinators

- Regional Coordinators act as direct liaisons with cities and towns on energy efficiency and renewable energy activities
- Located at each of the DEP Regional Offices:



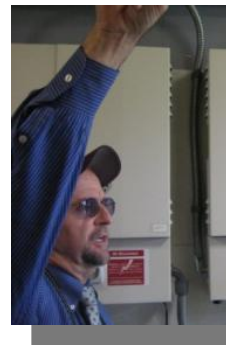
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Green Communities Division - Programs & Resources for Municipalities

- Green Communities Designation and Grant Program
- MassEnergyInsight energy tracking and analysis tool
- Municipal Energy Efficiency Program
- Energy Management Services Technical Assistance
- Clean Energy Results Program (CERP)
- Mass Municipal Energy Group (MMEG)
- Website filled with tools & resources:
www.mass.gov/energy/greencommunities

Email updates via e-blasts – Sign up by sending an email to:
join-ene-greencommunities@listserv.state.ma.us



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Recording & Presentation

- The webinar is being recorded and will be available on our website in approximately 48 hours at:
<http://www.mass.gov/eea/energy-utilities-clean-tech/webinars.html>
- Click on the camera icon top right of your screen to save any slides for future reference
- Use the Q & A icon on your screen to type in questions
- The slide presentation will also be posted at:
<http://www.mass.gov/eea/energy-utilities-clean-tech/webinars.html>
- Websites are also listed at end of presentation



Poll Question 1

- Who is in the audience today?
 - a) Municipalities and other public entities
 - b) Energy efficiency contractors
 - c) Non-profits
 - d) Homeowner or renter



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Agenda

- Initiative Background and Design
- Target Community Selection
- Evaluation Results
- Marketing and Outreach Insights
- Discussion

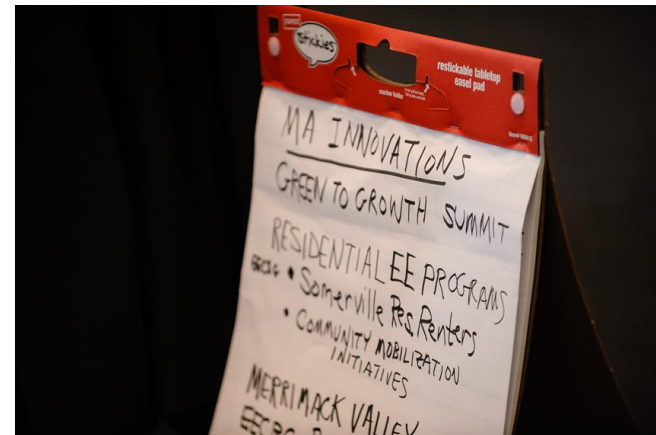




Initiative Background and Design

History Behind the Initiative

- Efficient Neighborhoods+SM (EN+) born from the Appreciative Inquiry Summit led by National Grid in the spring of 2012
 - Stakeholders interested in environmental justice and equity in service
 - Main issue is difficulty reaching lower to moderate income customers, typically who earn between 60-120% of state median income
- Included in the Massachusetts Joint Statewide Three-Year Electric and Gas Energy Efficiency Plan
- Statewide initiative that is community focused



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Initiative Background

- Extension of the Mass Save® Home Energy Services (HES) program designed to overcome barriers to higher participation and deeper savings in the residential sector
 - No point of contact
 - Split incentives
 - Higher job costs
 - Pre-weatherization barriers
 - Multifamily housing stock
- To avoid the burden of income eligibility verification, the initiative targets **communities**, not **customers**



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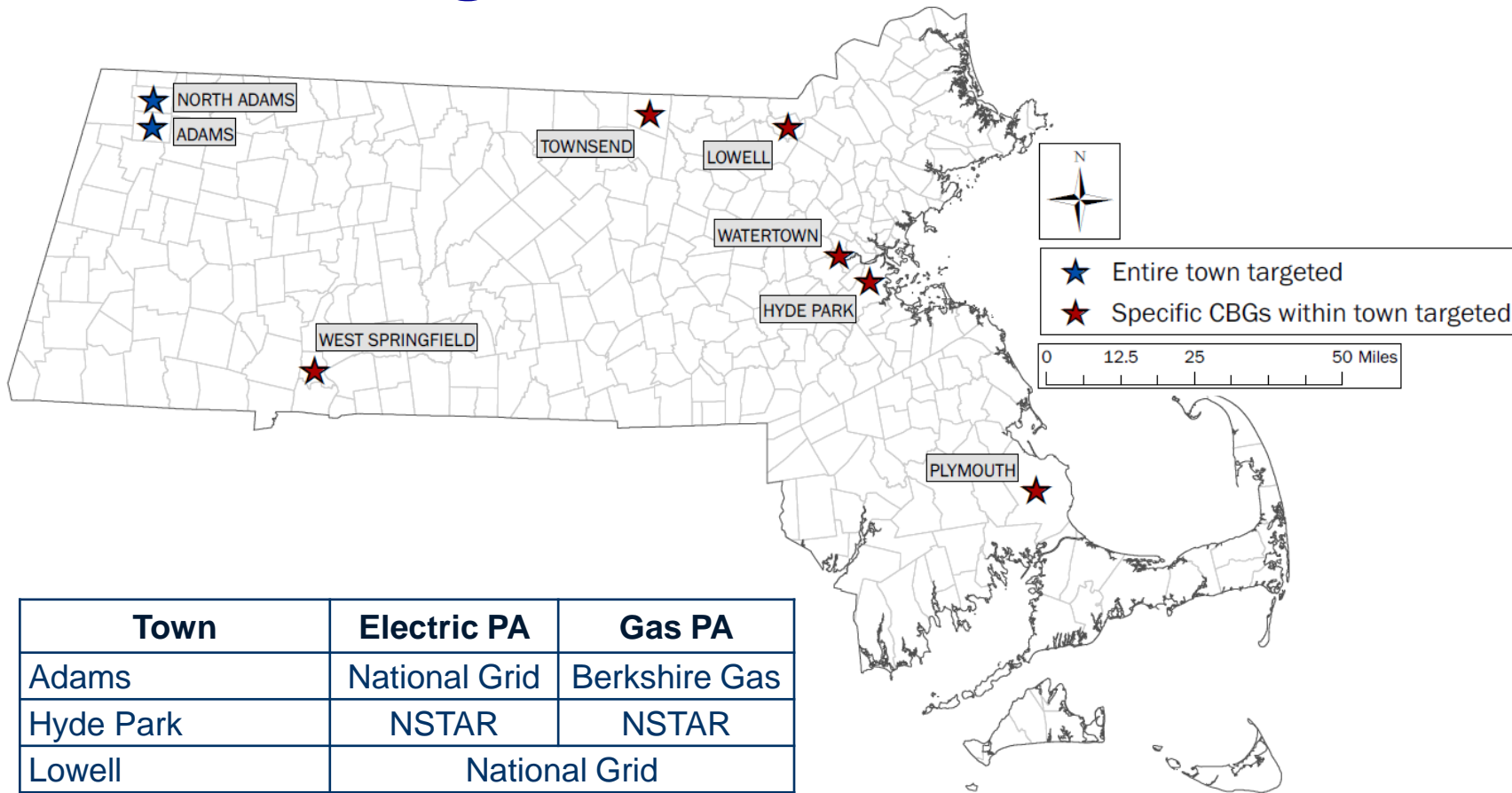


Initiative Design

Enhanced Incentive Description	Enhanced EN+ SM Incentives	Existing Incentive
Common Area Lighting (LED or CFL depending on fixture)	\$120	\$0
Pre-Weatherization Barrier Incentive	Up to \$800	\$Up to \$800
90% up to \$3000 Insulation per unit/single family	\$1,980	\$1,650 (Based on historical costs)
2-4 Family Landlord Whole House Insulation with Adder (50% of Customer Contribution)		(Based on historical job costs)
2 Family	\$5,130	\$4,000
3 Family	\$7,695	\$6,000
4 Family	\$9,500	\$7,500
Early Retirement Refrigerator (ENERGY STAR® labeled)	\$200	\$150
EN+ SM Boiler & Furnace Incentive Adder	\$100	\$0
Early Boiler Replacement (EBR) Rebate with Additional \$500 Incentive for Non-owner Occupied Properties	(\$4,000) Unrestricted Timeline	(\$4000) Restricted Timeline
EN+ SM Whole House \$500 Incentive Adder Package Insulation + Heating Equipment	\$500	\$0



Targeted Communities



Town	Electric PA	Gas PA
Adams	National Grid	Berkshire Gas
Hyde Park	NSTAR	NSTAR
Lowell	National Grid	
North Adams	National Grid	Berkshire Gas
Plymouth	NSTAR	
Townsend	UNITIL	
Watertown	NSTAR	National Grid
West Springfield	WMECO	Columbia Gas

Overview of Marketing and Outreach Tactics

- Collaboration across PAs and communities to ensure consistency and integrity of the campaign

Community	Mailer	Phone Call	Event	Community Organization	Mass Media (Newspaper, TV, Online)	Online	Facebook	In-person Outreach
Adams	✓		✓	✓	✓	✓	✓	✓
Hyde Park	✓	✓						✓
Lowell	✓	✓	✓	✓				✓
North Adams	✓		✓	✓	✓	✓	✓	✓
Plymouth	✓	✓						✓
Townsend	✓							
Watertown	✓	✓		✓				✓
West Springfield	✓	✓		✓				✓



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Poll Question 2

- What do you think is the biggest barrier to higher participation in energy efficiency programs by moderate-income residents?
 - a) Lack of awareness
 - b) Landlord/tenant issues
 - c) Money/incentive level
 - d) Ability to finance
 - e) Afraid it will be a hassle





Target Community Selection

Community Selection Considerations

- How to identify communities with high concentrations of target customers?
- How to identify customers that are most likely to fall into the desired segments?
- How to avoid non-qualifying customers or customers who already participated in the program?
- Which communities have on-the-ground support?
- Are there concurrent initiatives being implemented in the community?



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Community Selection Approach

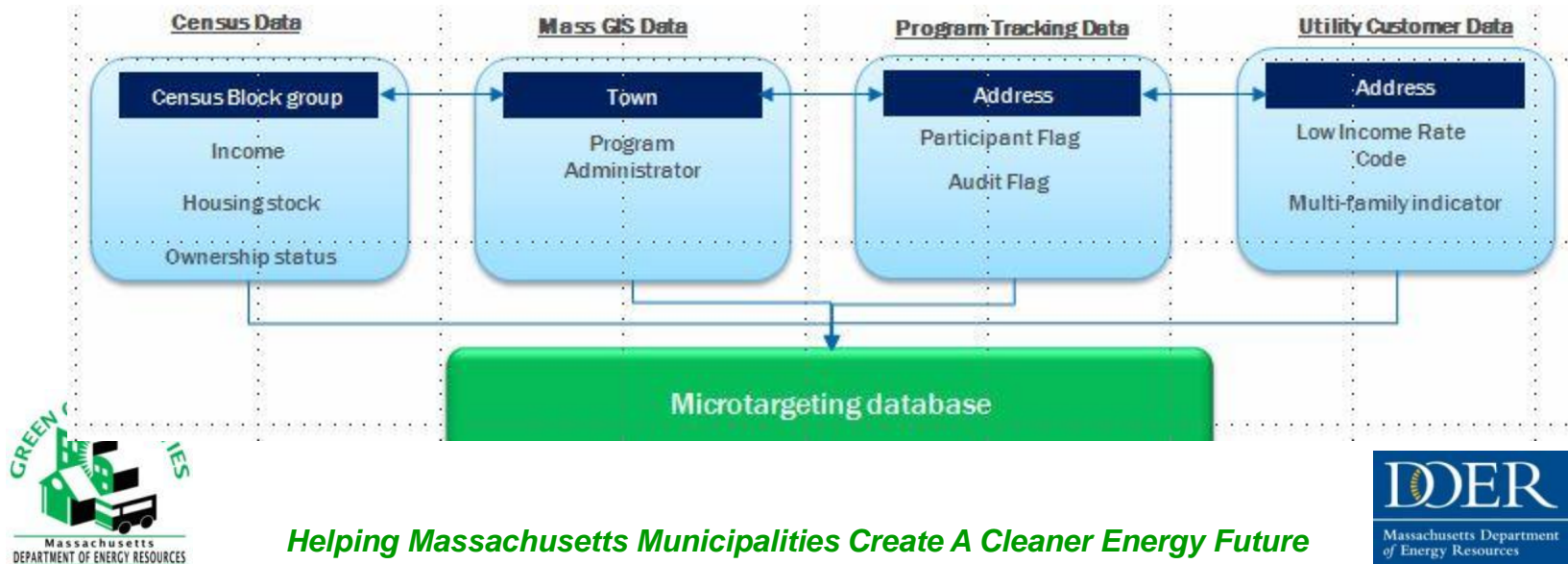
Microtargeting = Data + Mapping

- Multiple sources of data
 - Census
 - Past program participation
 - Utility customer
 - Other (secondary segmentation data, GIS shapefiles)
- Easy to use, efficient, flexible resource



Community Selection Process

- American Community Survey (ACS) data for 2007-2011
 - Data fields of interest available at the census block group level
 - Core data fields (housing count, population count, income, housing stock, home ownership status)
- MassGIS data
 - Maps of towns and census block groups
 - Maps of Massachusetts PA service territories
- Program tracking data
- Utility customer data



Community Selection Process Cnt'd

- Use a three-step approach



Community Selection Process (cont.)

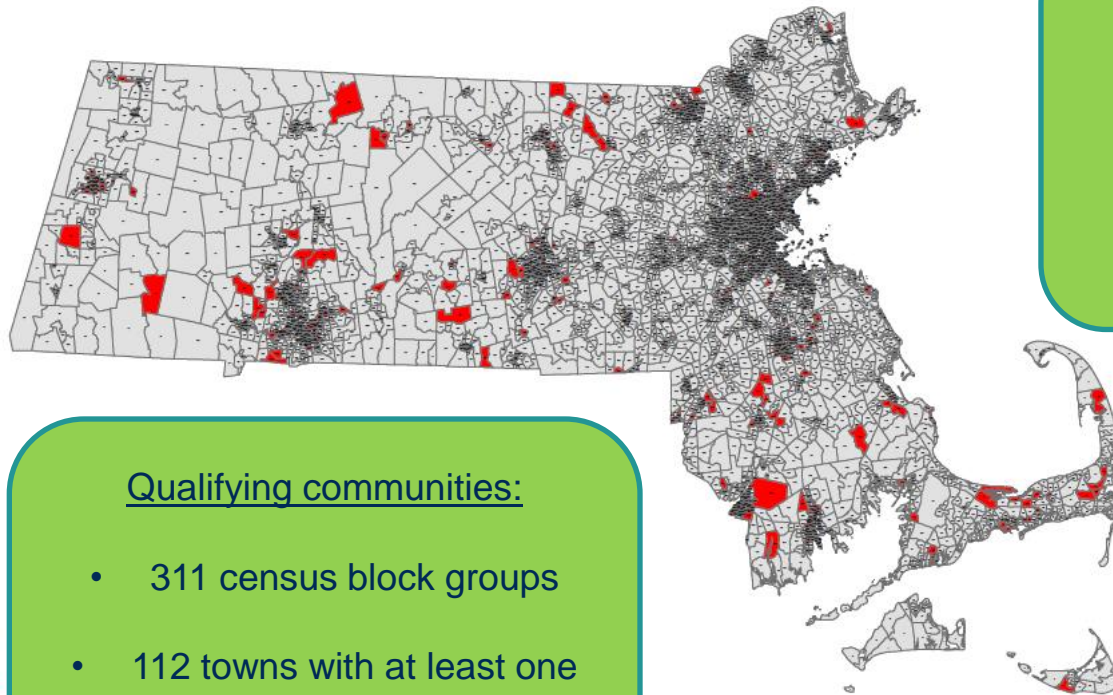
Step 1 - Initial data analysis to narrow the set of communities to target

- Target communities have a higher than average number of households with:
 - Incomes falling between 61% and 100% of median income
 - 1 – 4 unit buildings
- Also want to avoid communities with high concentrations of:
 - Low-Income Program eligible customers
 - Multi-family (5+ units) buildings



Community Selection Process (cont.)

Step 1 - Initial data analysis to narrow the set of communities to target



Qualifying communities:

- 30% of households or more have income between 61% and 100% of the state median income
- 30% of units or less are in 5+ unit structures

Qualifying communities:

- 311 census block groups
- 112 towns with at least one qualifying census block group
- 43,253 households

Community Selection Process (cont.)

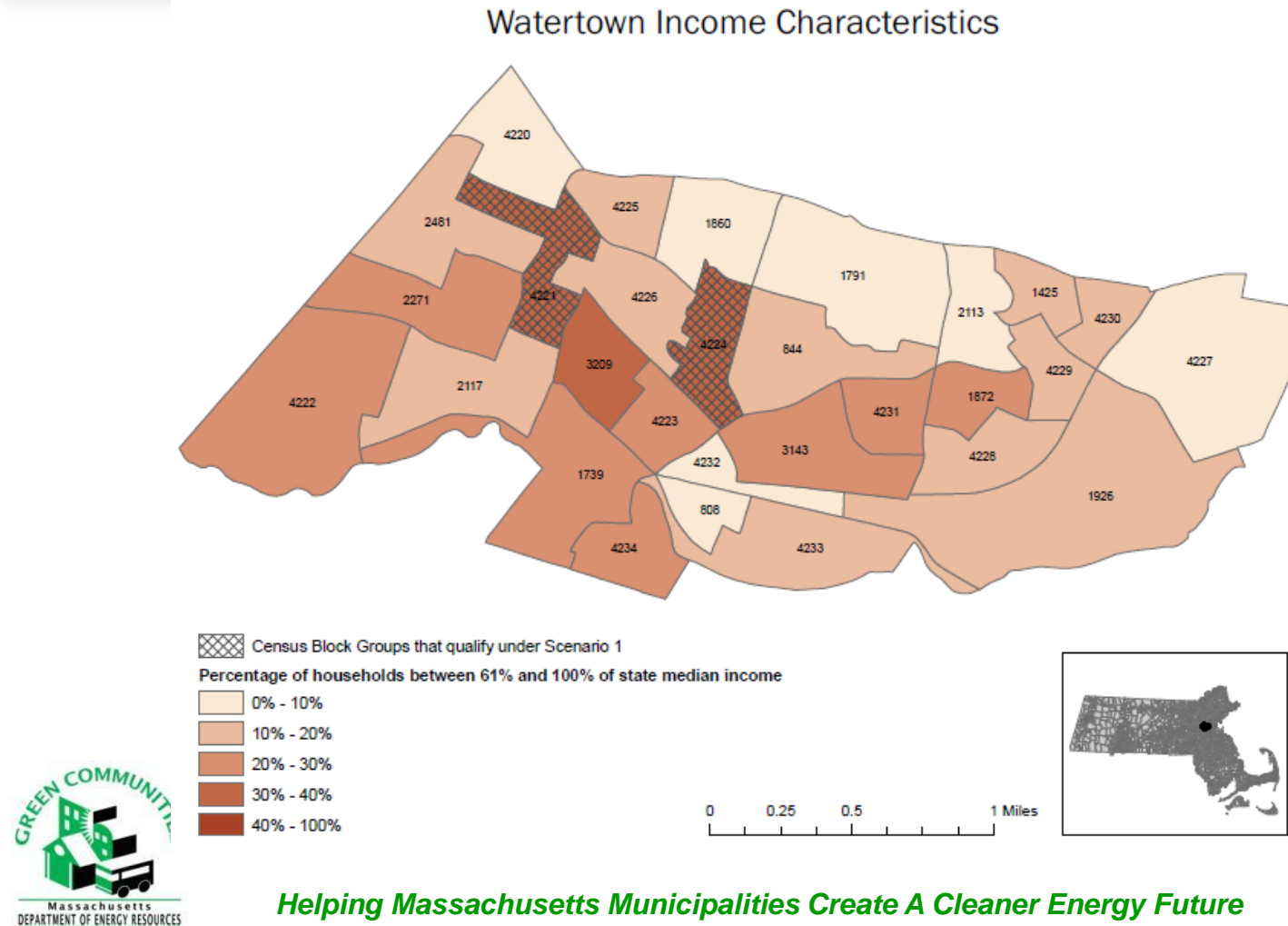
Step 2 - In-depth community analysis and final community selection

- In-depth analysis of qualified communities
 - Prior participation in PA-administered energy efficiency programs
 - Percentage of renters vs. owners
 - Building stock and characteristics (age, size, etc.)
 - Other characteristics



Community Selection Process (cont.)

Step 2 - In-depth community analysis and final community selection



Community Selection Process (cont.)

Step 3 – Customer Targeting List Development

- For selected communities, mapped customer addresses and rate codes to support custom marketing and targeting
 - Identification and removal of the low-income rate codes, past participants, customers in multi-family structures





Evaluation Results

Evaluation Scope and Activities

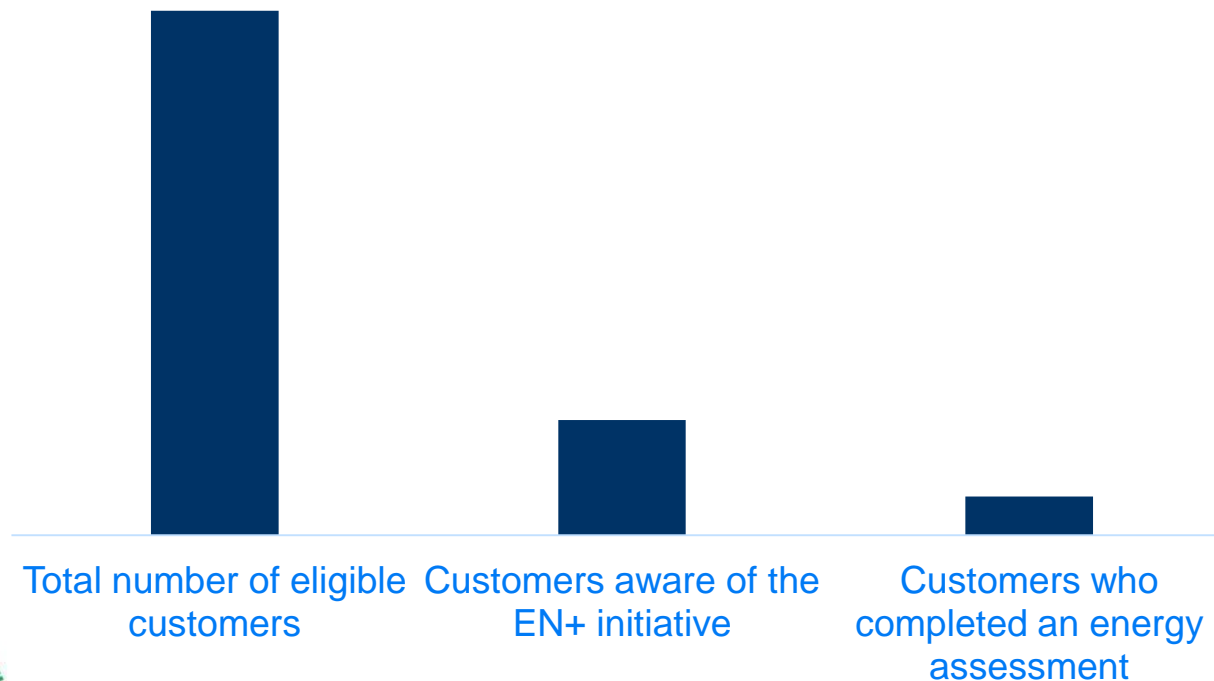
- Opinion Dynamics conducted process and impact evaluation of the initiative

	Staff Interviews	Participant Survey	Non-Participant Survey (EN+ SM & Comparison Communities)	Program Tracking Data Review and Summary	Difference in Differences Analysis	Incremental Cost Analysis
Process	✓	✓	✓			
Impact		✓	✓	✓	✓	✓



Evaluation Results

- The initiative reached 22% of all eligible customers in EN+SM target communities and completed assessments among 7% of them



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Evaluation Results

	Achieved During the Initiative's Implementation	% Incremental to the Initiative	# Incremental to the Initiative
Total # of energy assessments	927	69%	636
Total # of projects	248	76%	188
kWh savings	699,587	74%	516,784
Therm savings	35,351	84%	29,691
MMBTU savings	10,698	73%	7,786
Total # of LI customers channeled into the LI program	91	--	--

- The initiative was successful at lifting participation and energy savings
- Additional potential for savings from short implementation timeframe and additional energy efficient actions



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EN+SM Core Initiative

- Community targeting was relatively successful at reaching low to moderate income customers but less successful at increasing participation in rental properties

	EN+ SM Core Participants	General Population in EN+ SM Target Communities	2010 HES Participants
Income (% of State Median)	(n=109)	(n=414)	(n=886)
<60%	28%	41%	20%
60%-100%	50%	42%	34%
100%+	22%	18%	46%
Housing Type	(n=146)	(n=578)	(n=1,189)
1-unit	88%	68%	86%
2-4 unit	12%	31%	13%
Other	1%	1%	1%
Home Ownership	(n=146)	(n=578)	(n=1,200)
Own	94%	74%	98%
...and occupy	91%	68%	--
...do not occupy (landlords)	3%	6%	--
Rent	4%	25%	2%
Other	1%	2%	--





Marketing, Outreach, and Administration Insights

Outreach Insights

- The evaluation did not test the relative effectiveness of the various outreach tactics but identified some insights:
 - Sources of initiative's awareness varied but overall results suggest that in-person outreach and phone calls are effective outreach tactics
 - Word-of-mouth marketing can also be an effective marketing strategy
 - Exposure to initiative through more than one outreach method is an effective way of moving customers toward participation
- Outreach methods were community-tailored, high touch, and quite costly. Administration and management of such efforts was resource-intensive





Discussion

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